UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,141	10/31/2003	James Howard Drew	03-8012	3441

25537 7590 05/29/2009

VERIZON
PATENT MANAGEMENT GROUP
1320 North Court House Road
9th Floor
ARLINGTON, VA 22201-2909

EXAMINER	
STERRETT, JONATHAN G	
ART UNIT	**PAPER NUMBER**
3623	

NOTIFICATION DATE	DELIVERY MODE
05/29/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

Office Action Summary	Application No.	Applicant(s)	
	10/699,141	DREW ET AL.	
	Examiner	Art Unit	
	JONATHAN G. STERRETT	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3 and 5-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This **Final Office Action** is responsive to 13 January 2009. Currently **Claims 1, 3 and 5-34** are pending.

Response to Arguments

2. The applicants' arguments have been fully considered but are not persuasive.

The applicant argues that the claims are statutory re 35 USC 101.

The examiner respectfully disagrees.

The main parts of the method claim, ie. the generating, selecting, performing, analyzing and applying steps, fail to positively recite a tie to a particular machine or apparatus. Thus the claims are not statutory.

The applicant argues that the Official Notice is improper, however, the applicant fails to provide any evidence as to why the facts that are subject of the Official Notice are not, in fact, old and well known. Not only does the examiner maintain the official notice, but also, per the MPEP note for the record that the subject of the Official Notice, i.e. that it is old and well known to remove outliers from a probabilistic distribution and that it is old and well known in an organization for individuals to perform certain tasks.

The MPEP is clear that once Official Notice is taken, the burden is on the applicant to point out why the subject of official Notice is not old and well known. This

requires more than just allegation by the applicant that the ON is not old and well known.

On page 16 section IV.A. the applicant argues that Roth fails to teach the cited limitations of the claims. however, this argument does not comply with 37 CFR 1.111(b) because it fails to point out how the reference fails to teach the limitations.

The applicant argues on page 17 section IV.B. that the cited references fail to teahc the storing of employee task data where this data includes a number of tasks completed and an amount of time spend on a completed task.

The examiner respectfully disagrees.

First, storing data in a database, while not explicitly taught by the references, is old and well known and would provide a predictable result since the references do teach manipulating and analyzing employee data. The particular type of data that is claimed does not distinguish over the type of data claimed, because the method steps would be performed the same way (*see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP ' 2106.*

The applicant argues that Roth fails to teach "**generating sets of task scores based on a selected model design of task assignments utilizing said employee task data**". The applicant further argues that the examiner has taken official notice that MAU is known in the art to thus be a technique for incorporating various elements or inputs to determine a score"

The examiner respectfully disagrees.

The examiner has not taken official notice – this is what Roth teaches. On page 343 Roth states:

> Use of a MAU approach requires combining the various attributes important to decision makers. This can be accomplished by developing a set of functions that weight each attribute and combining the attributes into a single metric (the reader is referred to Edwards & Newman 1982 for one methodology to generate these attributes and functions). The functions in Figure 1 implicitly weight each attribute via the total number of points associated with that attribute (e.g. 100 points for job performance versus 60 points for diversity) and allow combination of the attributes because each attribute is scaled in effectiveness points. One can illustrate how to combine the attributes as follows. The values of $1,468,750 and $1,121,250 would convert to 98 and 75 effectiveness points respectively. The d score values of 1.0 and .25 would be "worth" 0 effectiveness points and 45 effectiveness points. The legal ratings of 3 and 4 would be worth 36 and 48 points. Summing the scores across both options, the cognitive ability test would have 98 + 0 + 36 = 134 points and the interview would have 75 + 45 + 48 = 168 points.[3]

Thus Roth teaches **generating sets of task scores** (i.e. the points determined above) **based on a selected model design of task assignments** (a model of measuring employee performance based on a cognitive test and interview above) **utilizing said employee task data** (how the employees performed in the above tests.

The applicant argues that cited reference fails to teach **selecting a centralized composite design as said model design**.

The examiner respectfully disagrees.

As is shown above, Roth teaches combining performance scores to come up with a composite score. One of the issues that Roth acknowledges with MAU is what elements to measure. Specifically Roth states on page 341 in the intro:

> MAU also increases the participation of decision makers in the utility analysis process by asking them what factors to consider, how to measure the factors, and what functions should be used to combine them. This manu-

From this passage it is implied that an issue in constructing an MAU is identifying "what factors to consider". Part of the answer in identifying what factors to consider is provided by Trocine.

Trocines teaches what is known in the art about factorial designs (a factorial design is a centralized composite design) where this analytic approach allows a decision maker to identify which variables in a model are significant. This would be important to a person of ordinary skill in the art attempting to use MAU, as taught by Roth because it would provide insight into what variables would have an impact on employee performance – thus which variables should be included in an MAU performance model because they are shown to have a significant impact on overall performance. Thus not only is the teachings of Trocine shown in the art and combinable with Roth and Edwards to achieve a predictable result (obvious as per KSR), one of ordinary skill in the art would be motivated to use the teachings of Trocine

because it would provide employee performance variables that are shown to be significant.

The applicant argues that Roth fails to teach "**performing a plurality of evaluations of said sets of tasks scores, said evaluations assigning productivity scores to said sets of task scores**".

The examiner respectfully disagrees.

MAU as taught by Roth evaluates individual performance (e.g. the cognitive test and interview as per above) to determine what the scores are for that performance (i.e. assigning productivity scores to the task scores).

The applicant argues that the cited references fails to teach "**analyzing said productivity scores to determine productivity parameters, wherein analyzing said productivity scores comprises applying linear regression techniques to said productivity scores utilizing said computing system**.

The examiner respectfully disagrees.

From above it is clearly seen that Roth teaches that an individual's performance can be measure by a weighted combination of scores for tasks that they perform; where Trocine provides an indication of what type tasks should be included in the combination. Edwards provides what is known in the art about multivariate regression, which is a technique for determining an equation in more than one variable, where the weights or

coefficients for those variables (i.e. determining productivity parameters) is determined through the statistical analysis provided by multivariate regression.

The applicant argues that the cited references fail to teach "**applying said productivity parameters to employee task scores for said employees to obtain said performance measures for said employees**"

The examiner respectfully disagrees.

As per the above discussion about Roth's teachings, one of the tasks with MAU is to combine various scores using weights. It has been clearly shown that Trocine teaches what variables to measure and Edwards teaches how to use statistical techniques to determine the weights to use with MAU in combining the individual's scores. Once a person of ordinary skill in the art has used multivariate regression analysis to determine the coefficients for the variables in an equation, they would be motivated by the teachings of Roth to use those coefficients (i.e. the productivity parameters) in combining task scores to determine a productivity measure for employees.

1. (Currently Amended) A computer implemented method of determining comparable performance measures for employees having differing task assignments, comprising:

> storing database in a database is well known - the type of data recited here is nonfunctional - the rest of the method steps would be performed the same, as claimed.

storing employee task data in a database of a computing system, wherein said employee task data includes a number of tasks completed and an amount of time spent on at least one completed task;

generating sets of task scores based on a selected model design of said task assignments utilizing said employee task data;

> Roth teaches generating task scores (eg. Interview and cognitive test) as part of multiattribute analysis (MAU).

selecting a centralized composite design as said model design;

> Trocine teaches that factorial analysis provides an indication of what variables in a simulation (model) are important

performing a plurality of evaluations of said sets of task scores, said evaluations assigning productivity scores to said sets of task scores;

> Roth teaches that employee tasks are scored by assigning a productivity score to how an employee performed (e.g. in an interview or an a cognitive test)

analyzing said productivity scores to determine productivity parameters, wherein analyzing said productivity scores comprises applying linear regression techniques to said productivity scores utilizing said computing system; and

> Edwards teaches that the various variables in a multivariable equation (like MAU) can have their coefficients (productivity paramters) determined.

applying said productivity parameters to employee task scores for said employees to obtain said performance measures for said employees.

> With the variables determined (Trocine) and the coefficients for those variables determined (Edwards), then a POSITA would combine the task scores using the MAU approach of Roth

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 3 and 5-28 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 and 22 are rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would <u>not</u> qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the

method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps, fail the first prong of the new Federal Circuit decision since they are not tied to another statutory class and can be performed without the use of a particular apparatus. Thus, **Claims 1 and 22** are non-statutory since it may be performed within the human mind. Dependent **Claims 3 and 5-21 and 23-28** are not statutory at least for the reasons given above for **Claims 1 and 22**.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1-5, 8-19, 22, 24 and 25-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Roth**, Philip; Bobko, Philip; "A Research Agenda for Multi-Attribute Utility Analysis in Human Resource Management", 1997, Human Resource Management Review, Volume 7, Number 3, pp.341-368. (hereinafter **Roth**) in view of **Edwards**, Jeffrey R; Parry, Mark E; "On the Use of Polynomial Regression as an alternative to Difference Scores in Organizational Research", Dec 1993, The Academy of Management Journal, Vol. 36, NO.6, pp.1577-1613, (hereinafter **Edwards)** and

further in view of **Trocine**, Linda; Malone, Linda; "Finding Important Independent Variables Through Screening Designs: A comparison of methods", 2000, Proceedings of the 2000 Winter Simulation Conference, pp.749-754, (hereinafter **Trocine)**.

Regarding **Claim 1**, Roth teaches:

A method of determining comparable performance measures for employees having differing task assignments, comprising:

generating sets of task scores based on a selected model design of said task assignments;

Page 352 para 1 and 2, sets of task scores are generated based on the Multi-Attribute Utility (MAU) approach to evaluating performance (note on page 1 that MAU can be used to evaluate job performance).

performing a plurality of evaluations of said sets of task scores, said evaluations assigning productivity scores to said sets of task scores;

page 343 para 2 and 3, the evaluations of the employees result in sets of task scores for the various attributes (e.g. interviews and cognitive ability test).

analyzing said productivity scores to determine productivity parameters;

page 353, Section 4 (last para), the combination of the attributes into a single score requires analyzing the scores to determine the weights (i.e. productivity parameters) for how they are combined – see also page 354 bottom paragraph – the MAU approach combines utility functions represented by the different inputs – these

utility functions represent the scored attributes that are weighted and combined for a single score. This section also discusses that the utility functions that are combined may be either linear or nonlinear.

and applying said productivity parameters to employee task scores for said employees to obtain said performance measures for said employees.

page 343 last para, the various score generated in an MAU analysis are combined such that the result of the MAU analysis results in a single score.

Roth teaches on page 345 para 4-5 that employees have different values of contribution based on their performance; Also on page 347 Table 1, feedback and goal-setting is provided for organizational productivity that is multi-faceted – the idea that there are different factors contributing to productivity.

Roth does not teach where the evaluation method is for evaluating different employees who are performing different tasks. However, Official Notice is taken that it is old and well known in the art for individuals in an organization to perform different tasks. Since Roth teaches using different utility functions that are combined to represent different factors as an input into productivity, it would have been obvious to one of ordinary skill in the art to modify those teachings to include applying the utility function idea to the different tasks performed by different employees, because it would provide a way to provide a comparative measure of different employee's contributions to a firm's productivity, thus improving the ability of the firm to value different employees.

Roth teaches the need to combine various functions in a weighted manner (i.e. weights are associated with the functions so they can be added together to result in a total number - as per the MAU approach). However Roth does not teach using linear regression techniques to determine the weights for the combination of the individual utility functions as per:

The method of claim 1, wherein said analyzing comprises applying linear regression techniques to said productivity scores.

Edwards teaches:

wherein said analyzing comprises applying linear regression techniques to said productivity scores.

page 1579 last para (see also equation 6 on this page).

Edwards teaches applying linear regression techniques to understand the relationship between measurable factors such that coefficients can be determined so those factors can be combined (the factors, e.g. X and Y, are functions to be combined to provide a score).

As noted above, Roth's teaches that there are separate functions, i.e. utility functions, that are weighted to be combined such that a score results.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth to include the determination of coefficient

values as provided by the linear regression techniques of Edwards, because it would improve the determination of the coefficients of the utility functions to be combined by using the well known and reliable technique of linear regression (i.e. polynomial linear regression).

Roth teaches the use of MAU variables with weights to determine a productivity score, but Roth does not teach using a design of experiments (i.e. a DOE, aka a response surface methodology) as per:

selecting a centralized composite design as said model design.

Trocine teaches:

selecting a centralized composite design as said model design.

Page 750 column 2 para 1 under sect 2.1, a factorial design is a centralized composite design. Trocine teaches limiting the number of variables (i.e. a limited factorial design) to limit the number of model runs that need to be performed (e.g. with k=15 a fractional factorial still means that 128 experiments or runs of the model ned to be performed).

Trocine teaches the use of fractional factorial experiments as a way to identify significant variables in a dataset (see page 749 column 1 para 1 under section 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth, regarding using A MAU approach to identify

factors to be combined with coefficients, to include the step of using a factorial design DOE to identify those variables, because it would provide a way to estimate those coefficients using proven DOE techniques and thus improve the estimation of productivity using the MAU approach taught by Roth.

Roth, Edwards and Trocine all address analyzing data (Roth and Edwards deal specifically with employee performance data.

However, Roth, Edwards and Trocine do not explicitly teach:

storing employee task data in a database of a computing system, wherein said employee task data includes a number of tasks completed and an amount of time spent on at least one completed task;

However, Official Notice is taken that storing data, such as the employee performance data such as taught by Roth, in a database of a computing system is old and well known in the art, and would have provided a predictable result in combination with the teachings of Roth, Edwards and Trocine because it would have provided a way to analyze data since it is stored in a database.

Roth, Edwards and Trocine teach the analysis of data (Roth teaches MAU applied to employee performance data, Edwards teaches applying regression to various aspects of job performance, Trocine teaches general techniques for analyzing data),

however they do not teach the specific data claimed, i.e. number of tasks completed and an amount of time spend on at least one completed task. Therefore the claims would not patentably distinguish over the cited references because the claimed functionality of what is done with the data is the same. I.e., the recited method steps would be performed the same regardless of the specific data. Further, the structural elements remain the same regardless of the specific data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP ' 2106.*

;

Regarding **Claim 3**, Roth notes that utility functions can be used in evaluation of employee performance (page 1 last para - page 2 first para). These utiliity functions combined provide a single output value (i.e. a productivity value). Roth teaches individual tasks that a person performs where the tasks are combined in a utility function. Roth does not teach a second order polynomial of the form A + B X + C X^2, where the A, B and C are constants and the productivity score is a second order polynomial in X (where X is a task).

However, the idea of using a second order polynomial with coefficients (i.e. an A, B and C) is old and well known in the art as a modeling approach as taught by Edwards

(see page 1579 equation 6 - here the total score is a function of A (i.e. B sub o), B (i.e. B sub 1) and C (i.e. B sub 3) in the second order with respect to X (including the B and C terms times X and X^2, respectively).

Edwards teaches that using polynomial regression provides a way to achieve a predictable result (since the mathematics utilized by regression are very well known in the art) – see page 1578 para 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth to include the polynomial regression approach of Edwards, because it would have improved the estimation of productivity using a well known approach of regression to provide a predictable result in estimating the effects of the coefficients of tasks for use in an equation that calculates productivity

Regarding **Claim 5**, Roth does not teach:

wherein generating said sets of task scores comprises:

determining whether said sets of task scores exceed a predetermined number; and

modifying said centralized composite design by a fractional factorial when said sets of task scores exceed said predetermined number.

Trocine teaches that screening designs to identify variables can result in excessive runs or experiments as provided by a full factorial and even a fractional factorial can result in a large number of experiments.

Trocine teaches limiting based upon a predetermined number of variable (page 751 column 2 bottom para) Trocine teaches that the combinations of runs required by a fractional factorial can result in a large number of required experiments and the desired result of using a fractional factorial is to avoid the excessive number of runs required by a full factorial. The guidelines suggested by Trocine teach the determining and modifying steps - i.e. limiting the number of variables to 20.

It would have been obvious to one of ordinay skill in the art at the time of the invention to modify the teachings of Roth and Trocine to further include limiting the task scores by a predetermined number in performing a fractional factorial, because it would make performance of the DOE manageable by limiting the number of experimental runs required.

Claim 14 recites limitations similar to those addressed by the rejection of **Claim 5** above, and therefore is rejected under the same rationale.

Regarding **Claim 8**, Roth teaches:

The method of claim 1, wherein generating comprises adding a number of recorded task scores to said sets of task scores.

Page 352 last para, the development of various scores by group members suggests the development of more than one set of scores, i.e. thus adding a number of recorded scores to a base set of scores.

Regarding **Claim 9**, Roth teaches:

The method of claim 8, wherein said sets of task scores are scaled to represent performance by employees over a common work period,

page 343 para 3,4, the MAU approach includes combining attributes based on factors (i.e. they are scaled). Since the particular tasks are an interview and a test, this suggests work performed over a common period.

Roth does not teach:

with a fixed number of hours worked.

However Official Notice is taken that using such a measure is known in the art to provide normalization, i.e. a standardization of what time workers work such that a comparison can be made between the amount of work achieved.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Roth's teachings to include measuring productivity over a fixed number of hours, because it would ensure a standard comparison is made between employees.

Regarding **Claim 10**, Roth teaches:

The method of claim 1, wherein said plurality of evaluations are performed by a plurality of evaluators, said evaluators being familiar with said task assignments and with assigning productivity scores.

Page 350 para 2, Roth teaches various techniques for assigning scores where the assigners are familiar with what is being rated and in assigning scores.

Regarding **Claim 11**, Roth teaches:

The method of claim 10, comprising:

assigning evaluator parameters to each of said plurality of evaluators;

page 357 last para, parameters are assigned to the evaluators such that correlation coefficients are calculated.

comparing said plurality of productivity scores assigned by each of said evaluators using said evaluator parameters in analyzing said productivity scores

page 357 last para, correlation coefficients are compared across the evaluators.

Roth does not teach where the scores are compared **to determine anomalous ones of said plurality of evaluations**;

removing said anomalous ones of said plurality of evaluations; and returning to analyzing said productivity scores.

However, Official Notice is taken that it is old and well known in the art to determine and remove anomalous data points for the purpose of improving accuracy of results in an analysis.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth to include determining and removing anomalous scores, because it would improve the accuracy of the overall MAU analysis.

Claim 12 recites limitations addressed by the rejection of **Claim 9** above, and is therefore rejected under the same rationale.

Regarding **Claim 13**, Roth teaches:

The method of claim 10, wherein generating comprises adding a number of recorded task scores to said sets of task scores,

Page 352 last para, the development of various scores by group members suggests the development of more than one set of scores, i.e. thus adding a number of recorded scores to a base set of scores.

and using productivity scores assigned to said recorded task scores for each of said evaluators as one of said evaluator parameters

page 357 last para, correlation coefficients are compared across the evaluators – these correlation coefficients are based on the recorded task scores provided by the evaluators.

Claims 15 and 16 recite similar limitations to those addressed by the rejection of **Claims 2 and 3** above, and are therefore rejected under the same rationale.

Claims 17-19 recites similar limitations to those addressed by the rejection of **Claims 10-11 and 13** above by Roth, and are therefore rejected under the same rationale.

Claim 22 recites similar limitations to those addressed by the rejection of **Claims 2 and 3** above by Roth and Edwards, and are therefore rejected under the same rationale.

Claim 24 recites similar limitations to those addressed by the rejection of **Claim 8** above by Roth, and is therefore rejected under the same rationale.

Claim 25 recites similar limitations to those addressed by the rejection of **Claim 9** above by Roth, and is therefore rejected under the same rationale.

Claim 26 recites similar limitations to those addressed by the rejection of **Claim 10** above by Roth, and is therefore rejected under the same rationale.

Claim 27 recites similar limitations to those addressed by the rejection of **Claim 11** above by Roth, and is therefore rejected under the same rationale.

Claim 28 recites similar limitations to those addressed by the rejection of **Claim 13** above by Roth, and is therefore rejected under the same rationale.

Claim 29 recites similar limitations to those addressed by the rejection of **Claim 22** above by Roth, and is therefore rejected under the same rationale. Furthermore regarding **Claim 29**, Roth and Edwards do not explicitly teach performing his method using computer readable medium containing instructions for causing a computer system to perform method steps, however Official Notice is taken that performing the method steps taught by Roth and Edwards using computer software running on a computer system is old and well known in the art. Using this approach is known to make method steps faster and more efficient since they are running on a computer. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth and Edwards to perform their method steps using computer software running on a computer system, because it would make performance the of the method steps faster and more efficient since they are running on a computer.

Claims 30-32 recite similar limitations to those addressed by the rejection of **Claims 10-11 and 13** above by Roth, and are therefore rejected under the same rationale.

6. **Claims 6, 7, 20, 21 and 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Roth** in view of **Edwards** in view of **Trocine** and further in view of Jacobson, Tom; "Reaching New Heights", June 1999, Credit Union Management, Madison, Vol. 22, Iss. 6, p.50, 4 pgs. (hereinafter **Jacobson**).

Regarding **Claim 6**, Roth does not teach:

The method of claim 1, comprising:

calculating statistical measures for said performance measures over a time period; and

identifying employees having performance measures outside a range of said statistical measures.

and as per Claim 7,

The method of claim 6, comprising identifying trends in said performance measures over multiple ones of said time period.

Page 3 para 2, the charting of an agents performs suggests a continual tracking of the agent's performance to identify how they are performing over time.

Jacobson teaches, as per Claim 6:

calculating statistical measures for said performance measures over a time period; and

page 3 para 2-3, variance management is calculating statistical measures for an agent over a period of time

identifying employees having performance measures outside a range of said statistical measures.

Page 3 para 4, employees are identified which fall outside the control limits (i.e. the range of statistical measures, since the article is discussing using SPC charts).

And as per Claim 7

comprising identifying trends in said performance measures over multiple ones of said time period.

Page 3 para 2, the charting of an agents performs suggests a continual tracking of the agent's performance to identify how they are performing over time.

Jacobson teaches that this approach provides a continuous improvement approach to managing a company such that employees are continuously improving (page 4 #8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth to include the SPC charting techniques of Jacobson, because it would improve employees performance by instilling a sense of continuous improvement in the workforce.

Claim 33 recites similar limitations to those addressed by the rejection of **Claim 6** above by Roth and Jacobson, and is therefore rejected under the same rationale.

Regarding **Claim 20**, Roth, Trocine and Edwards do not teach:

calculating statistical measures for said performance measures over a time; and

identifying employees having performance measures outside a range of said statistical measures.

And as per **Claim 21**

comprising identifying trends in said performance measures over multiple ones of said time period.

Jacobson teaches:

calculating statistical measures for said performance measures over a time period; and

page 3 para 2-3, variance management is calculating statistical measures for an agent over a period of time

identifying employees having performance measures outside a range of said statistical measures.

Page 3 para 4, employees are identified which fall outside the control limits (i.e. the range of statistical measures, since the article is discussing using SPC charts).

And as per Claim 21

comprising identifying trends in said performance measures over multiple ones of said time period.

Page 3 para 2, the charting of an agents performs suggests a continual tracking of the agent's performance to identify how they are performing over time.

Jacobson teaches that this approach provides a continuous improvement approach to managing a company such that employees are continuously improving (page 4 #8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth, Trocine and Edwards regarding using a model that provides a productivity calculation for individual employees to include the SPC charting techniques of Jacobson based on productivity scores provided by this model, because it would improve employees performance by instilling a sense of continuous improvement in the workforce.

7. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Roth** in view of **Edwards** and further in view of **Trocine**.

Regarding **Claim 23**, Roth and Edwards do not teach:

determining whether said sets of task scores exceed a predetermined number; and

modifying said centralized composite design by a fractional factorial when said sets of task scores exceed said predetermined number.

Trocine teaches:

determining whether said sets of task scores exceed a predetermined number; and

modifying said centralized composite design by a fractional factorial when said sets of task scores exceed said predetermined number.

Trocine teaches that screening designs to identify variables can result in excessive runs or experiments as provided by a full factorial and even a fractional factorial can result in a large number of experiments.

Trocine teaches limiting based upon a predetermined number of variable (page 751 column 2 bottom para) Trocine teaches that the combinations of runs required by a fractional factorial can result in a large number of required experiments and the desired result of using a fractional factorial is to avoid the excessive number of runs required by a full factorial. The guidelines suggested by Trocine teach the determining and modifying steps - i.e. limiting the number of variables to 20.

It would have been obvious to one of ordinay skill in the art at the time of the invention to modify the teachings of Roth and Edwards to further include limiting the

task scores by a predetermined number in performing a fractional factorial, because it would make performance of the DOE manageable by limiting the number of experimental runs required. The combination of Roth and Edwards teaches determining a polynomial model that produces a productivity score – modifying these teachings provides a predictable result by optimizing Roth and Edward's polynomial system using the well known DOE techniques taught by Trocine.

8. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Roth** in in view of **Edwards** in view of **Trocine** and further in view of **Jacobson.**

Regarding **Claim 34**, Roth and Jacobson teach the limitations addressed in Claim 6 above, and Roth and Jacobson do not teach:

a second order polynomial of the form A + B X + C X^2, where the A, B and C are constants and the productivity score is a second order polynomial in X (where X is a task).

However, the idea of using a second order polynomial with coefficients (i.e. an A, B and C) is old and well known in the art as a modeling approach as taught by Edwards (see page 1579 equation 6 - here the total score is a function of A (i.e. B sub o), B (i.e. B sub 1) and C (i.e. B sub 3) in the second order with respect to X (including the B and C terms times X and X^2, respectively).

Edwards teaches that using polynomial regression provides a way to achieve a predictable result (since the mathematics utilized by regression are very well known in the art) – see page 1578 para 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Roth, Trocine and Jacobson to include the polynomial regression approach of Edwards, because it would have improved the estimation of productivity using a well known approach of regression to provide a predictable result in estimating the effects of the coefficients of tasks for use in an equation that calculates productivity.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS 5-24-09

/Jonathan G. Sterrett/

Primary Examiner, Art Unit 3623